

HOT TOPICS

Additional References for Methyl-Tertiary-Butyl Ether (MTBE), Perchlorate, Unexploded Ordnance (UXO), and Energetics

Methyl-Tertiary-Butyl Ether (MTBE)

Natural Attenuation of MTBE in the Subsurface Under Methanogenic Conditions

USEPA Office of Research and Development, EPA/600/R-00/006, January 2000. *Details a case study conducted by U.S. Environmental Protection Agency's National Risk Management Research Laboratory, Ada, OK, and the U.S. Coast Guard. Evaluates the attenuation of MTBE by comparing field and laboratory degradation processes.*

Biodegradation and Inhibitory Effects of Methyl-Tertiary-Butyl Ether (MTBE) Added to Microbial Consortia.

C.M. Horan and E.J. Brown, Proceedings of the 10th Annual Conference on Hazardous Waste Research. *Evaluates the metabolism of MTBE and potential toxic effects of MTBE to microbial organisms at concentrations that inhibit oxygen consumption.*

www.mtbepollution.com

All you ever wanted to know about MTBE, including cleanup standards, remediation technologies, case histories, and technical reports.

Methyl-Tertiary-Butyl Ether (MTBE): Its Movement and Fate in the Environment and Potential for Natural Attenuation

AFCEE/ERT Toolbox II, May 2000. *Summarizes the literature on the natural degradation of MTBE in field scale and laboratory studies and makes recommendations regarding data collection and analysis in support of natural attenuation supplemented with long-term monitoring.*

Perchlorate

Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization Based on Emerging Information

USEPA National Center for Environmental Assessment, 1998, PDF file available at www.epa.gov/ogwdw/ccl/perchlor/perchlo.html#new. *This document provides a review of occurrence, analytical methods, human toxicity, ecological toxicity, and transport and transformation of perchlorate. Identifies data gaps and recommends future studies.*

EPA Region 9 Update: Perchlorate

June 1999, PDF file available at www.epa.gov/safewater/ccl/perchlor/r9699fac.pdf. *Provides information on the occurrence of perchlorate in EPA Region 9, including Lake Mead and the Colorado River watershed. This short document also describes the provisional RfD for protection of human health.*

Unexploded Ordnance (UXO)

<http://www.estcp.org>

Environmental Security Technology Certification (ESTCP), Department of Defense (DoD) Web Site. *This web site contains numerous UXO detection technology projects that are either undergoing evaluation and demonstration or have been verified. Each project is described in terms of objective (purpose), results, and benefits. Go to the web site and look under Projects, then look under UXO. If you are interested in energetics, search on the word "energetics" for projects associated with pollution prevention.*

<http://www.uxocoe.brtrc.com/index.htm>

UXO Center of Excellence, DoD Web Site. *This is a good source of general information regarding DoD activities in the area of UXO. The Center has five mission areas: Active Range Clearance, Countermining, UXO Environmental Remediation, Explosive Ordnance Disposal, and Humanitarian Demining. The web site also contains links to other UXO-related sites.*

Department of Defense Directive number 6055.9 July 29, 1996

DoD Explosives Safety Board (DDESB) and DoD Component Explosive Safety Responsibilities. *A short directive that outlines roles and responsibilities of DoD offices.*

Air Force Instruction 32-3001, October 1, 1999

Explosive Ordnance Disposal Program. *This instruction identifies Air Force Explosive Ordnance Disposal (EOD) program requirements.*

Energetics

<http://www.atsdr.cdc.gov/>

Agency for Toxic Substances and Disease Registry (ATSDR). *ATSDR is part of the federal agency called the Center for Disease Control. ATSDR produces fact sheets on various pollutants, including RDX and HMX. RDX is CAS# 2691-41-0 and HMX is CAS#121-82-4. The fact sheets describe the explosives and discuss their fate and effect in the environment. Look under ToxFAQs and search by name for individual fact sheets.*

<http://www.mmr.org>

Massachusetts Military Reservation Website. *Fact Sheet #2000-04 describes the CS-19 area as formerly used as an ordnance and military waste disposal site. Contaminants include RDX, acetone, chromium and manganese.*